OPERATING- AND MAINTENANCE MANUAL

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beba Panmixer
Type: B 80-T

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Very honoured customer!

They acquired a qualitatively high-quality and long-lived machine. This manual obtain the intended use, teaches the safe and rapid full serviceability of the mixer. The attention of the references helps to avoid dangers to decrease costs of repair and other down-times the reliability and the life span to increase. The manual is to be supplemented around instructions due to existing national regulations for accident prevention and to environmental protection

NOTE:

Manual before start-up read and consider! After the new EEC machine guideline only trained, adept persons may work on the machine, who were instructed on the basis the manual and at the machine. An adhesion or a guarantee is impossible therefore if:

- the references of this manual not to be considered,
- the machine is incorrectly served, cleaned or waited,
- functional changes without agreement of the manufacturer to be accomplished,
- no original spare parts be used the machine their regulation purpose is not supplied.

Use the manual also as working document. Note arising questions and desires. It is sufficiently place for your notes available. We use each reference also for improvements. The dialogue with us offers more satisfaction to you.

Yours

Dipl.-Ing. Ulrich Witte
Geschäftsführer
beba Mischtechnik GmbH

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1 Machine description

1.1 Introduction

The Allround Mixer for today's building materials: beba B 80-T
Bag scarifiers enables simple and well dosed feeding of mixer extra transport wheels for easy loading. No tools needed for detaching mixing mechanism for cleaning
Easy travelling thanks to large wheels. Protective grid lockable with safety cut-out for drum lid
The professional mixer with unique operation diversity, for bricklayers • stucco workers • floor and tile layers • painters • etc.

The beba B 80 T is the ideal mixer for painters, stucco workers, floor and tile layers, bricklayers and plasterers. It offers a wide range of advantages. Mixing mechanism of 3 offset mixing arms results in much better mixing quality
than conventional types of concrete and mortar mixers. Time saving rate of about 60 % guarantees economical best mixing results.

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1.2 Technical specifications

External diameter of tank:	60 cm
Total height of paddle mixer:	123 cm
Weight of paddle mixer:	115 kg.
Connection voltage of motor:	one phase, three phase
Motor power:	1,1 KW
Volume:	80 litres
Mix: Approx.:	60 liter
Discharge height:	62 cm
Speed of rotation:	44 rpm

1.3 Supplies

Use only the beba-Mischtechnik supplies; If you use other ones you don´t have any possibility of guarantee.
Please use

- Gear oil
- Minimal ammount of lubridants
- Cleaner for the gear

For the machine caring please use an low alloyed machine oil, for example CL 88

1.4 Environmental conditions

temperature	0 - 50 °C
relative dampness	< 70 %
fire criticilaty	By using oil, fats and lubricants There is an acute fire danger

1.5 Emissions

Noise	< 80 db
smoke	beba-supplies contain no materials which are injurious to health
dust	

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2 Basic Safety Instructions

2.1 Warnings and Symbols

The following signs and designations are used in the operating manual to designate instructions of particular importance:

- **Important:** special information on how to use the machine most efficiently.

- **Attention:** special information and/or orders and prohibitions directed towards preventing damage**.**

- **Danger:** orders and prohibitions designed to prevent injury or extensive damage.

2.2 Basic operation and designated use of the machine

- The machine has been built in accordance with state-of-the-art standards and the recognized safety rules of the European Community. Nevertheless, its use may constitute a risk to life and limb of the user or of third parties, or cause damage to the machine and to other material property.

- The machine must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual. Any functional disorders, especially those affecting the safety, should therefore be rectified immediately by the operaing personnel.

- The machine is designed exclusively for sawing metals. Using the machine for purposes other than sawing metals is considered contrary to its designated use. The manufacturer/supplier cannot be held liable for any damage resulting from such use. The risk of such misuse lies entirely with the user.

- Operating the machine within the limits of its designated use also involves observing the instructions set out in the operating manual and complying with the inspection and maintenance directives.

2.3 Organizational measures

- The operating instructions must always be at hand at the place of use of the machine.

- In addition to the operating instructions, observe and instruct the user in all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection e.g. the coolant is to be disposed of in accordance with local regulations.

- Personnel entrusted with work on the machine must have read the operating instructions and in particular the chapter on safety before beginning work. Reading the instructions after operation has begun is too late. This applies especially to persons working only occasionally on the machine, e.g. during setting up or maintenance.

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- For reasons of security, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewellery – such as rings – may be worn. Injuries may result from being caught up in the machinery or from rings catching on moving parts.

- Check – at least from time to time – whether the personnel is carrying out the work in compliance with the operating instructions and paying attention to risks and safety factors.

- Observe all safety instructions and warnings attached to the machine! See to it that these are always perfectly legible.

- In the event of safety-relevant modifications or changes in the behaviour of the machine during operation, stop the machine immediately and report the malfunction to the competent authority or person.

- Never make any modifications, additions or conversions which might affect safety without the supplier's approval. This also applies to the installation and adjustment of safety devices and valves as well as to welding work on load-bearing elements.

- Spare parts must comply with the technical requirements specified by the manufacturer. Spare parts from the manufacturer's original equipment can be relied to do so.

- Never modify the software of programmable control systems which affect the safety. Replace hydraulic hoses within stipulated and appropriate intervals even if no safety-relevant defect have been detected.

- Adhere to prescribed intervals or those specified in the operating instructions for routine checks and inspections.

- For the execution of maintenance work, tools and workshop equipment adapted to the task on hand are absolutely indispensable.

- The personnel must be familiar with the location and operation of fire extinguishers.

2.4 Selection and qualification of personnel – basic responsibilities

- Any work on or with the machine must be executed by reliable personnel only. Statutory minimum age limits must be observed.

- Employ only trained or instructed staff and set out clearly the indiviudal responsibilities of the personnel for operation, set-up, maintenance and repair.

- Make sure that only authorized personnel works on or with the machine.

- Define the machine operator's responsibilities – also with regard to observing traffic regulations – giving the operator the authority to refuse instructions by third parties that are contrary to safety.

- Do not allow persons to be trained or persons taking part in general training course to work on or with the machine without being permanently supervised by an experienced person.

- Work on the electrical system and equipment of the machine must be carried out only by a skilled electrician or by instructed persons under the supervision and guidance of a skilled electrician and in accordance with electrical engineering rules and regulations.

- Work on the hydraulic system must be carried out only by personnel with special knowledge and experience of hydraulic equipment!

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2.5 Safety instructions governing specific operational phases

- Avoid any operational mode that might be prejudicial to safety.
- Take the necessary precautions to ensure that the machine is used only when in a safe and reliable state.
- Operate the machine only if protective and safety-oriented devices, such as removable safety devices, emergency-off equipment, sound proofing elements and exhausters are in place and fully functional.
- Check the machine at least once per working shift for obvious damage and defects. Report any changes (incl. changes in the machine's working behaviour) to the competent organization of person immediately. If necessary, stop the machine immediately and lock it.
- In the event of malfunctions, stop the machine immediately and lock it. Have any defects rectified at once.
- Always observe the on and off switch and control indicators in accordance with the operating instructions.
- Before starting up or setting the machine in motion, make sure that nobody is at risk.
- Never switch off or remove suction devices when the machine is in operation.
- Observe the adjusting, maintenance and inspection activities and intervals set out in the operating instructions, including information on the replacement of parts and equipment. These activities may be executed by skilled personnel only.
- Brief operating personnel before beginning special operations and maintenance work and appoint a person to supervise the activities.
- In any work concerning the operation, conversion or adjustment of the machine and its safety-oriented devices or any work related to maintenance, inspection and repair, always oberserve the start-up and shut-down procedures set out in the operating instructions and the information on maintenance work.
- Ensure that the maintenance area is adequately secured.
- If the machine is completely shut down for maintenance and repair work, it must be secured against inadvertent starting by locking the principal control elements and removing the ignition key and / or by attching a warning sign to the main switch.
- To avoid the risk of accidents, individual parts and large assemblies being moved for replacement purposes should be carefully attached to lifting tackle and secured. Use only suitable and technically perfect lifting gear and suspension systems with adequate lifting capacity. Never work or stand under suspended loads.
- For carrying out overhead assembly work, always use specially designed or otherwise safety-oriented ladders and working platforms. Never use machine parts as a climbing aid.
- Clean the machine, especially connections and threaded unions, of any traces of oil, fuel or preservatives before carrying out maintencance / repair. Never use aggressive detergents.
- Before cleaning the machine with water, steam jet (high-pressure cleaning) or detergents, cover or tape up all openings which – for functional reasons – must be protected against water, steam or detergent penetration. Special care must be taken with electric motors and switchgear cabinet.

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- After cleaning, remove all covers and tapes applied for that purpose.
- After cleaning, examine all fuel, lubricant and hydraulic fluid lines for leaks, loose connections, chafe marks and damage. Any defects found must be rectified without delay.
- Always tighten any screwed connections that have been loosened during maintenance and repair.
- Ensure that all consumables and replaced parts are disposed of safely and with minimum environmental impact!
- Use only original fuses with the specified current rating. Switch off the machine immediately if trouble occurs in the electrical system.
- Work on the electrical system or equipment may only be carried out by a skilled electrician or by specially instructed personnel under the control and supervision of such electrician and in accordance with the applicable electrical engineering rules.
- If provided for in the regulations, the power supply to parts of machines and plants, on which inspection, maintenance and repair work is to be carried out must be cut off. Before starting any work, check the de-energized parts for presence of power and ground or short-circuit them in addition to insulating adjacent live parts and elements.
- The electrical equipment of machines is to be inspected and checked at regular intervals. Defects such as loose connections or scorched cables must be rectified immediately.
- Necessary work on live parts and elements must be carried out only in the presence of a second person who can cut off the power supply in case of danger by actuating the emergency shut-off or main power switch. Secure the working area with a red-and-white safety chain and a warning sign. Use insulated tools only.
- Before starting work on high-voltage assemblies and after cutting out the power supply, the feeder cable must be grounded and components, such as capacitors, short-circuited with a grounding rod.

2.6 Instructions for the operating personnel

- Carry out welding, flame-cutting and grinding work on the machine only if this has been expressly authorized, as there may be a risk of explosion and fire.
- Work on hydraulic equipment may be carried out only by persons having special knowledge and experience in hydraulic systems.
- Depressurize all system sections and pressure pipes (hydraulic system, compressed-air system) to be removed in accordance with the specific instructions for the unit concerned before carrying out any repair work.
- Hydraulic and compressed-air lines must be laid and fitted properly. Ensure that no connections are interchanged. The fittings, lengths and quality of the hoses must comply with the technical requirements.
- Always wear the prescribed ear protectors.
- When handling oil, grease and other chemical substances, observe the product-related safety regulations.
- Be careful when handling hot consumables (risk of burning or scalding).

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2.7 Mobile machinery and equipment

- Only use lifting gear and tackle of sufficient capacity for loading.
- Appoint a competent marshaller to assist in the lifting operations.
- Lift machinery and equipment properly with suitable lifting gear and only in accordance with the operating instructions (fixing points for lifting tackle, etc.).
- Only use suitable means of transport of adequate carrying capacity.
- Fasten the loads safely using the suitable fixing points.
- Before or immediately after completion of the loading operations, the machine must be secured by means of recommended devices against unintentional changes of position and a corresponding warning sign attached to the machine.
- Carefully refit and fasten all parts to be removed for transport purposes before recommisiong the machine.
- Cut off the external power supply of the machine even if only minor changes of place are envisaged. Properly reconnect the machine to the supply mains before recommissioning.

For recommissioning only proceed in accordance with the operating instructions.

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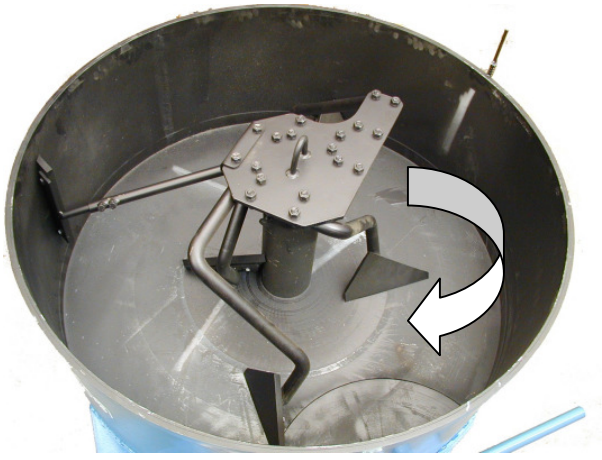
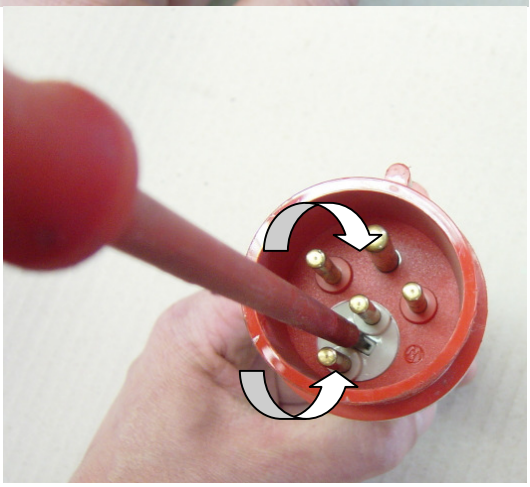
3 Instruction on Initial Operation

After having connected the mixer to the mains supply, the next **very important step** is to examine whether the sequence of the mains phases agrees with the electrical wiring of the mixer. If it does not agree, please follow the below mentioned steps.

The mixing arms should turn clock wise.
To check this start the machine without mixing medium.
Plug in the power plug into the electrical net.

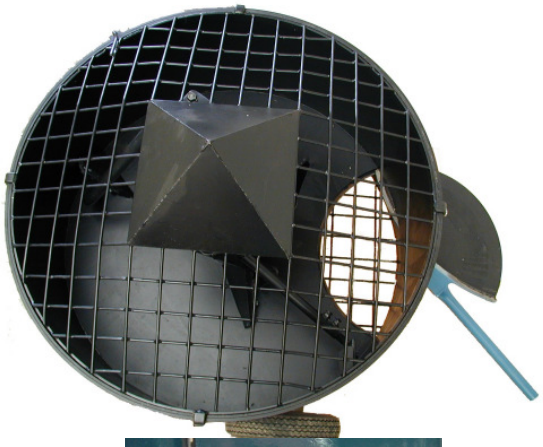


If this is the case, the situation can easily be corrected by swapping (interchanging) 2 of the cables in the red mains-plug. The motor of the mixer is then polarized in the correct rotating direction.



IMPORTANT:

For safety reasons, the mixer has been constructed so that its functions can only be switched on when the protective grille has been closed.



The safety switch of operates via a mechanical extension of the protection grille and is pressing the stop button down to switch of the mixer as soon as the protection grille will be lift up.

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3.1 Transportation

Danger:
Improper transport will cause unforeseen danger. Because of this the packet mixer is only allowed to transport with a forklift truck or lifting crane and trained people for before mentioned machines.

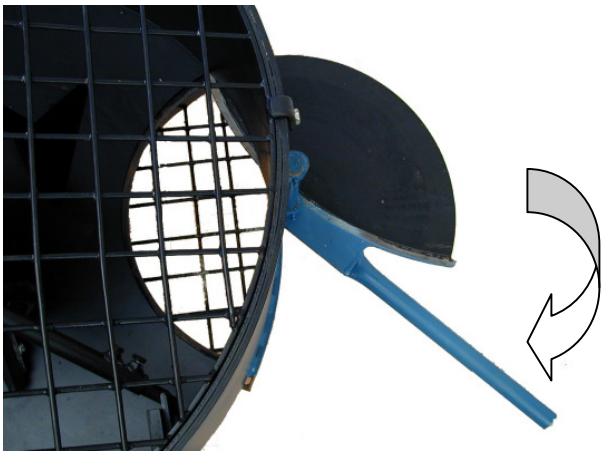
The machine will be started by pressing the green button at the motor safeguard at the side of the machine. Make sure that the mixing arms rotate clockwise.

For safety reasons always remove the mains plug before attaching the mixing tools or doing any adjustments or service works.

3.2 Readjustment procedure:

The moulded mixing paddles are made of wear-proof rubber material. As they are subjected to slight continuous wear, readjustments should be carried out according to requirement.

Slack off the mixing arm nuts, then readjust the arms so as to approach the mixing paddles as much as possible to tank wall and bottom without actually touching these. Then tighten the nuts again.



The mixing drum can be emptied via the sectional opener at the drum bottom whilst turning mixing arms.

3.3 Precautionary measures:

The machine is equipped with a thermic motor safeguard protecting it against overloding.

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4 Application of the machine:

Danger:
Improper operation will be cause unforeseen Dangers. That means there is a danger for persons as well as the possibility to damage the machine. Therefore only trained or instructed staff and set out clearly the indiviudal responsibilities of the personnel for operation, set-up, maintenance and repair

Gefahr:
To avoid accidents
Set the mixer only in perfect condition in operation. Do not put your hands inside the mixing area.

Before daily work check the following:

General condition of the machine (visual check)

If necessary clean the machine from dust before work.

Hinweis:
Alway remember the mixer adjustments and write it down carefully. Time will be saved if another operater will take over the machine.

First start the machine by pressing the green buttom, then add the materials which are to be mixed into the mixing tank. The volume of the added materials should not exceed approx. 60 percent of the tank volume.

When the mix is homogeneous, it is ready to be exhausted. This is done by first placing e.g. a wheelbarrow below the exhaustion gate. Then open the gate by pulling the arm.

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5 Application of the machine:

After application the machine should be cleaned by flushing with water or high-pressure cleaner. In connection with the cleaning of the mixing tank it may be necessary to open the protection grille, placed on top of the machine.
Warning: First stop the machine and remove the CEE-plug as an extra safety precaution.

Generally speaking the machine consists of one integral unit. However, on top of the central shaft of the machine a cab is fitted. No tools are required to remove this cap. When the cap has been removed, a lifting eye becomes visible. The lifting eye is applied for lifting the paddle mixer, e.g. on to a truck.

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6 Maintenance

6.1 Safety hints for maintenence

Danger:

There is a danger to heard the arms and fingers. Before proceeding any kind of service to the mixer. Disconnect the main power supply from the mixer. Secure the main plug to avoid unintentional switch on. (Hang up a warning shield)

Attention:

Never use aggressive detergents. Die Anwendungshinweise der Hersteller der Reinigungsmittel genau beachten! Ungeeignete Reinigungsmittel können zur Beschädigung der Maschine führen.

Attention:

After cleaning, examine all fuel, lubricant and hydraulic fluid lines for leaks, loose connections, chafe marks and damage. Any defects found must be rectified without delay.

6.2 General maintenence

Steps:

1. If the machine is completely shut down for maintenance and repair work, it must be secured against inadvertent starting by locking the principal control elements and removing the ignition key and / or by attching a warning sign to the main switch.

2. Clean the machine, especially connections and threaded unions, of any traces of oil, fuel or preservatives before carrying out maintencance / repair. Never use aggressive detergents.

3. After cleaning, examine all fuel, lubricant and hydraulic fluid lines for leaks, loose connections, chafe marks and damage. Any defects found must be rectified without delay.

6.3 Lubrication

The mixer is equipped with four gearboxes. Two mixer gearboxes, one rotary table gearbox, one for the lifting device. The gearboxes are filled with lubricants that reduce the friction and protect for corrosion. Therefore a regular lubrication is necessary for a trouble free operation.

6.4 Lubrication overview

Point of lubrication	Lubricant	Lubricant amount	
Gearbor mixer motor	Wiol 320	1,7 Litre	

6.5 Getriebeölwechsel

Gearbor mixer motor:

Change the gearbox oil after the first 2000 operating hours but not later then 1 year.

1. Let off old oil
2. Clean gearbox with naphta.
3. Fill in 1.7 l needed lubricant.
4. Close filling hole.

Dispose old oil properly.

7 Spare parts

Use our ordering address.

beba Mischtechnik GmbH
Div. spare parts
Bartmannsholte 21
D - 49632 Essen, Oldenburg
Germany
Tel: +49 5434 9246-0
Fax: +49 5434 9246-29

Placing a spare part order please give us the following information:

B 80-T

Name of the machine:
Number of the machine:
spare part number:

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7.1 Spare Part List – beba B 80-T Pan Mixer

1. Safety grating
2. Clamp
3. Main shaft
4. Inner arm
5. Mixer blade, inner
6. Middle arm
7. Mixer blade, middle
8. Outer arm
9. Mixer blade, outer
10. Scraber
11. Mixer blade, scraber
12. Mixing tank
13. Safety grating
14. Frame
15. Gear
16. Motor 0,75 KW
17. Wheel 250 mm
18. Wheel 200 mm
19. Bucket plate
20. Motor safeguard with CEE-plug and phases turner
21. Motor safeguard guard
22. Safety cut-out

Safety cut-out

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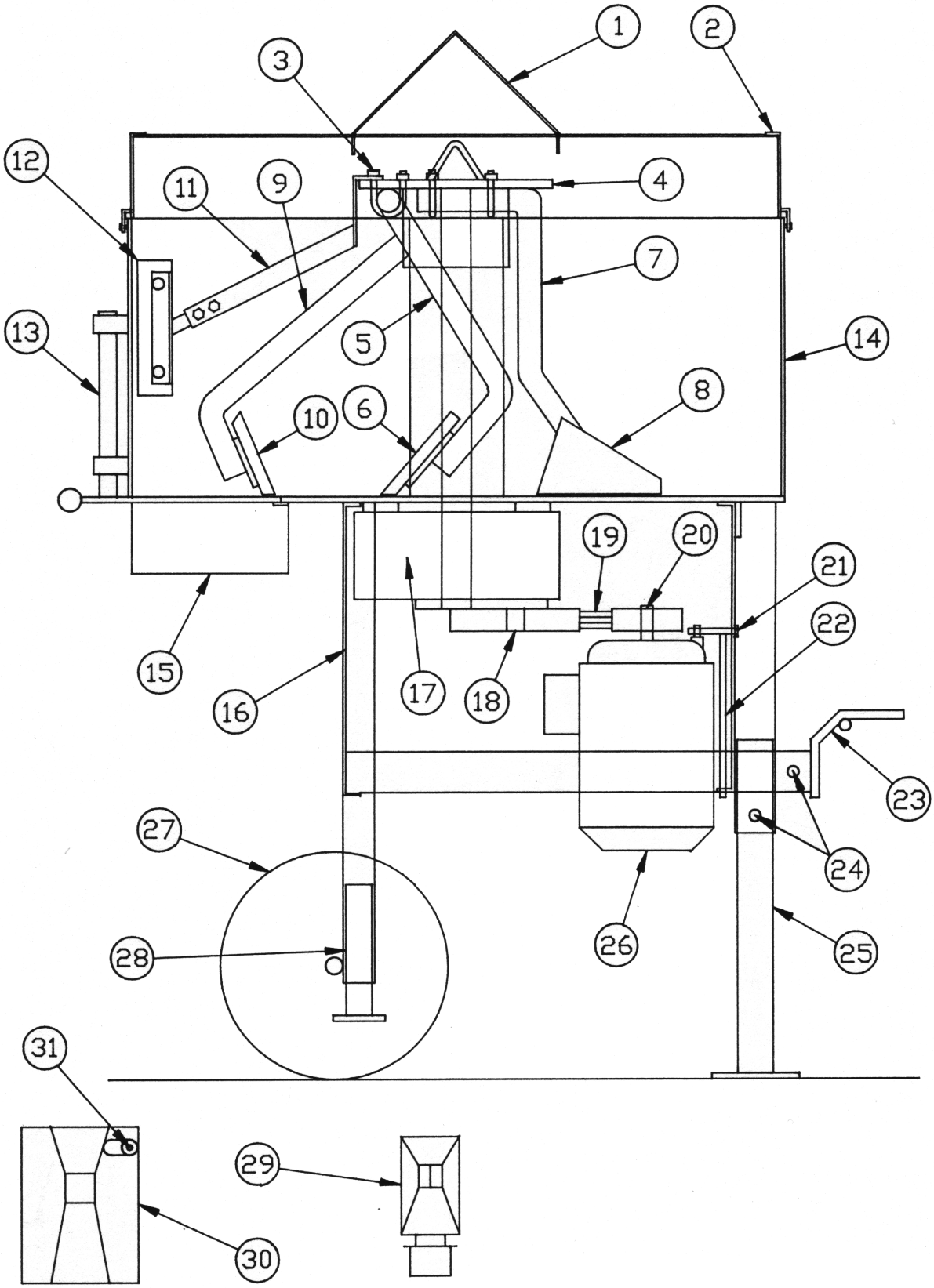
7.2 Spare part drawing



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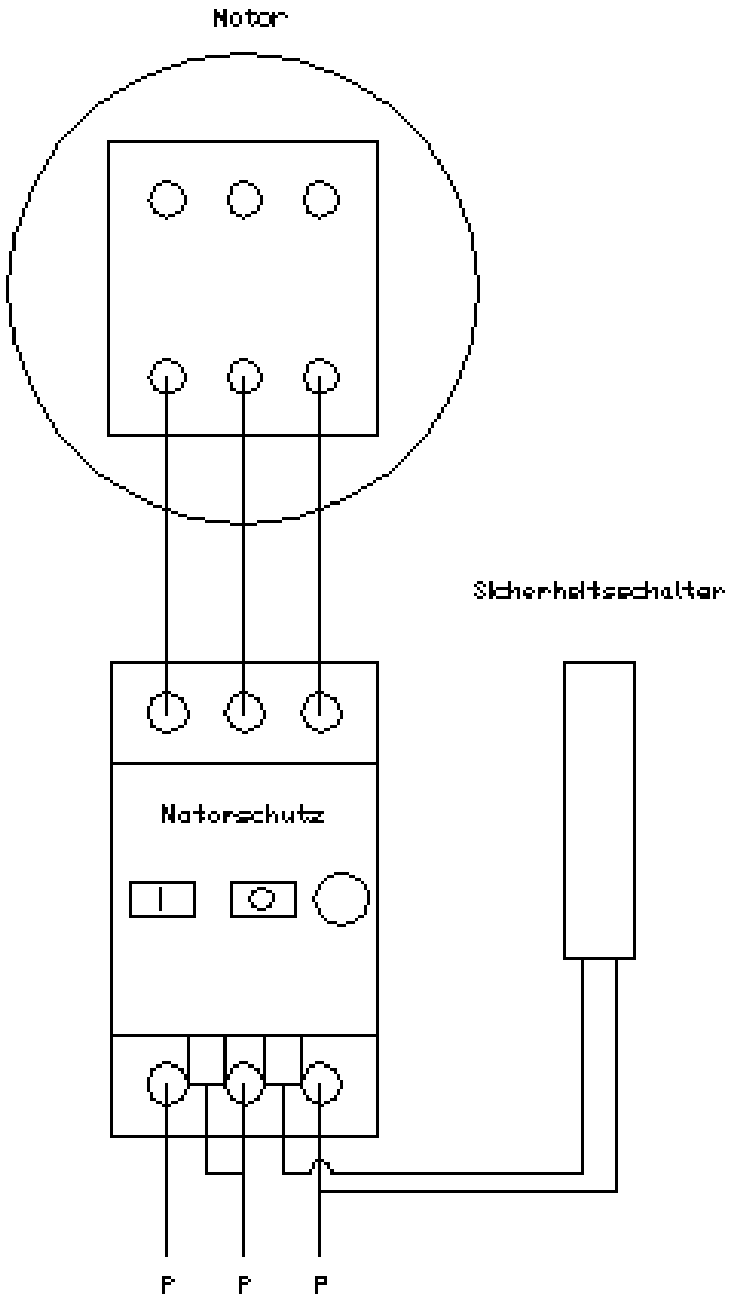
8 Schaltplan

B 80-T in 1.1 kW, 380 Volt, 50 Hz



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9 CE-Konformitätserklärung

CE-Konformitätserklärung
EC Declaration of Conformity

Wir/We

beba Mischtechnik GmbH
Bartmannsholte 21
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erklären hiermit, dass die nachfolgende genannte Maschine den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie entspricht. Bei einer mit uns nicht abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

declare, that the following machinery complies with all the essential health and safety requirements of the EC directive. The beba Mischtechnik GmbH only guarantees the exact functioning of the equipment in the technical way as it has been designed and developed by beba Research & Development department. If an operator takes action to modify any mechanical or electrical part the EC Declaration expires immediately and all the responsibility for forthcoming problems whatever would be fully on the operators risk.

Gerät
Description of machinery: **beba Tellerzwangsmischer**
beba Pan Mixer

Typ
Type of machinery: **B 80-T**

EG-Richtlinie / EC Directives:

- EG Maschinenrichtlinie 89/392/EWG mit Änderungen, i.d. F 91/368/EWG
  EC Directive for machinery 89/392/EEC with amendments, i.d. F 91/368/EWG

Angewandte harmonisierte Normen
Applicable harmonized standards:

EN 292-1, EN 292-2

Angewandte nationale Normen und technische Spezifikationen
Applicable national standards and technical specifications:

Essen/Oldenburg, 29.04.2004

(Ulrich Witte, Geschäftsführer)

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